

THE AMENDMENTS

In the Specification:

Please revise Paragraph [0005] as follows:

[0005] In view of the problems mentioned, improved ECDs and EDDs based on the microcup technology have been developed. Similar to the microcup based electrophoretic displays, the microcup based ECDs or ~~EPDs~~ EDDs of the present invention comprise a plurality of isolated cells (or microcups) filled with an electrolytic fluid disposed between two electrodes. The filled microcups may be sealed continuously with a sealing material by a one-pass or a two-pass process to achieve high resolution and color addressability. Other advantages of the microcup based ECDs and EDDs include superior physicomechanical properties such as impact and flexure resistance, compatibility with roll-to-roll manufacturing processes, format flexibility and low cost.

Please revise Paragraph [0035] as follow:

[0035] An optional primer layer (13a) may be used to pre-treat the conductor film to improve the adhesion between the microcup material and the conductor film and also to facilitate the mold release. A conductive filler or additive such as particles or fibers of a conductive polymer may be added to the primer layer to promote the electron transfer reaction. Examples of conductive polymers include polyacetylene, poly(p-phenylene), poly(p-phenylene vinylene), poly(phenylene sulfide), ~~polypyrrole~~ polypyrrole, polythiophene, polyaniline and doped derivatives thereof; carbon black; graphite; metal oxides such as ITO (indium-tin oxide), ATO (antimony-tin oxide) or ZTO (~~zinc-indium oxide~~) (zinc-tin-oxide) and metals such as Au, Ag, Cu, Fe, Cr, Al, Mg, Zn or Ni. Transparent conductive particles such as ATO particles and conductive polymer particles are particularly preferred. A more extensive list of electrical conducting polymers can be found in, for example, "Functional Monomers and Polymers" edited by M. Takemoto, R.M. Ottenbrite, and M. Kamachi (1997); and "Handbook of Conducting Polymers", edited by T.A. Skotheim, R. L. Elsenbaumer, and J. Reynolds, (1998).

Please revise Paragraph [0036] as follows:

[0036] The optional primer layer may also comprise a gas absorbing material. Suitable gas absorbers (in particular for chlorine, hydrogen or oxygen) include rubbers such as polybutadiene, nitrile rubbers, styrene-butadiene copolymers; ~~norbornene~~ norbornene such as 5-ethylidene-2-norbornene and the like. The primer layer composition may further comprise a catalyst for the hydrogenation or oxidation reaction. Suitable catalysts include complexes of Co or V, such as Co acetoacetate, Co acetylacetone, V acetoacetate or V acetylacetone.

Please revise Paragraph [0062] as follows:

[0062] An electrochromic fluid may comprise a redox chromophore such as bis (2-phosphonoethyl)-4,4'-bipyridinium dichloride or other viologens, an electrolyte such as 0.01-0.1 M of lithium perchlorate (LiClO₄), lithium triflate ($\text{Li}(\text{F}_3\text{CSO}_3)$) ($\text{Li}(\text{F}_3\text{CSO}_3)$) or tetrabutylammonium (TBA) triflate and an inert solvent, such as γ -butyrolactone, 3-~~methoxypropionitrile~~ methoxypropionitrile and the like. The fluid may also contain white pigment particles of rutile titania or zinc oxide to improve the reflectance and contrast ratio.

Please revise Paragraph [0063], Point 6, as follows:

6. Laminate the sealed array of display cells with a second conductor film (76) pre-coated with an adhesive layer (77) which may be a pressure sensitive adhesive, a hot melt adhesive or a heat, moisture or radiation curable adhesive. Preferred materials for the adhesive include acrylics, styrene-butadiene copolymers, styrene-butadiene-styrene block ~~copolymers~~ copolymers, styrene-isoprene-styrene block copolymers, ~~polyvinylbutyal~~ polyvinylbutyral, cellulose acetate butyrate, polyvinylpyrrolidone, polyurethanes, polyamides, ethylene-vinylacetate copolymers, epoxides, multifunctional acrylates, vinyls, vinyl ethers and their oligomers, polymers or copolymers. Preferably, the adhesive layer comprises dispersed conducting particles as described above for the primer and sealing layers to provide the anisotropic conductivity with the conductivity in the direction perpendicular to the electrode plate.